

SAMSUNG

iPOLiS

Real-time Network **Dynamic 30X**

Pan & Tilt



30X PTZ Network Camera SNP-3300 User's Manual

Thank you for purchasing a SAMSUNG iPOLiS Network Camera.
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH

iPOLiS

A brand that is integrated into Samsung's network products, ***iPOLiS*** stands for a convenient world (Polis) made safe (Police) through Samsung's superior network performance(Internet protocol). With ***iPOLiS*** products' clear digital images transmitted over the internet, real-time monitoring is possible anywhere with an internet connection. Easy remote control functions and the use of existing networks minimize installation costs. With ***iPOLiS***, experience a world of convenience connected anytime, anywhere.

Preface

Thanks for purchasing of 30X PTZ Network Camera SNP-3300.

This is a user instruction manual for a 30X PTZ Network Camera SNP-3300 that employs Samsung Techwin's SVIII DSP system with superior low light capability.

The user who installs and operates the product shall be aware of this manual and other manuals referenced by this manual before the installation and operation and use properly.

This manual and the software and hardware explained here are protected by copyright law.

So the copy, reprint and translation to other languages of a part of or all contents of this user manual without permission of SamsungTechwin Co., LTD are not allowed except for the copy for general use within the scope of copyright law.

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Note

If you refer to the enclosed Quick guide and the Manual in the CD, you can learn how to use Network Manager.

Note to User

This machine's electromagnetic waves have been registered as suitable for business purposes; the retailer and consumer should be aware of this registration. If in the case of wrongful purchases, please exchange the product for a home use product.



Correct Disposal of This Product

(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products. The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.



FCC Compliance Statement

Caution : Any changes or modification in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

Note : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING : Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

WARNING : To prevent electric shock and risk of fire hazards:

Do NOT use power sources other than that specified.
Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

Product Warranty and Limitations

The manufacturers of this product do not take any responsibility for this product; therefore, the manufacturer does not authorize the third-party, but allows that retailer is responsible.

The product warranty does not extend to cover accidents, negligence, abuse, or wrongful use for the whole or any part of the product. Additionally, the manufacturer does not provide warranty for any additional parts or affiliations.

The warranty is for one year from the purchase date. During the period, warranty does not extend to malfunction in these areas.

- Malfunction due to user's negligence
- Dismantlement or replacement by the user
- Connection to alternate power source
- Malfunction due to natural disasters (fire, flood, tsunami, etc.)
- Replacement due to wear and tear
- Instability of network

Warning Symbols

Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.



Danger :

Misuse or wrongful operation of the product may result in death, injury or bring about other fatal results. It indicates absolute caution when operating.



Caution :

Misuse or wrongful operation of the product may result in slight injury or damage to the product. It indicates caution when operating.



Note :

Indication that the user needs to be aware of certain matters, or will find matters helpful in operating the product.

Danger



Before Setup

- Please set up the proper voltage before connecting to power source.
- Please be sure the power is turned off before setup.

- There is risk of shock or fire; be sure to avoid setup in places with high humidity.
- To prevent shocks, please connect the ground wire.
- Do not install the camera on a surface that can not support it.
- Unless the surface is suitable, it could cause falling or other hazards.

During Use

- When opening the product cover, there is a risk of electric shock. Only a professional should open the cover.
- Please use only in an environment with standard temperature and humidity.
- Please do not plug in multiple products to a power source; it is often the cause of fires.
- Please do not place water or heavy objects on the product; it is often a cause of malfunction.
- Please do not use in a location with propane gas, gasoline or other flammable substances to avoid risk of explosion or fire.
- Please do not touch the power plug with wet hands to avoid electric shock.
- Do not pull on the power plug with too much force; a damaged plug may cause electric shock or fires.
- Don't connect the RJ-45 cable to a terminal by constraint.
- Stop using your camera when you find a malfunction.
If you use your camera around smoke or unusual heat for a long time, Fire may be caused.

- Random replacement of built-in battery by other types of batteries may cause explosion. The battery shall be replaced by the same battery. The used batteries shall be disposed carefully because they can cause environment pollutions.
- The battery shall be replaced by the same battery.
- The used batteries shall be disposed carefully because they can cause environment pollutions.

Disassembly and Cleaning

- There is a risk of malfunction, shock or other dangers. Please do not disassemble or attempt to fix the product.
- To prevent malfunction or shock, please do not use a wet cloth or oil-based cleaning product to clean the product exterior. Clean the exterior of the product with a dry cloth.

Caution



- Do not install under extreme temperature conditions
Use only under temperature conditions between -0°C and +40°C. Provide good ventilation when using in high temperature conditions.

- Do not install under unstable lighting conditions.
Severe lighting changes or flickering may hinder normal camera operation.
- Do not drop the camera or subject it to physical shock.
May cause a product malfunction.
- Never keep the camera face to strong light directly.
May damage the CCD.
- Avoid touching the camera lens.
The lens is the most important component of the camera. Be careful not to smear it with fingerprints.
- Do not expose the camera to rain or other types of liquids
Wipe dry any liquids. Liquids may contain minerals that are corrosive to Electronic components.
- Do not expose the camera to radioactivity.
Radioactivity exposure may damage the CCD.
- Do not disassemble the camera.
If you disassemble the product as you please, a Repair Center doesn't repair it for free.
- Please check the created network place first, before trying to connect to a network.
- Please use only the power adapter that is provided with the product.
- Please check national laws to be sure that using the product for monitoring purposes is not illegal.

Ch1. Overview

1.1. 30X PTZ Network Camera SNP-3300 Introduction

The SNP-3300 is a high-tech network camera that uses MPEG-4 codec technology to allow high compression rates and clear picture quality by allowing for high frame rates to be transmitted through the network.

By using the network, remote connection, monitoring, and control is possible from any location for simple use; additionally, set-up requires only a network.

The 30X PTZ Network Camera SNP-3300 utilizes embedded software solutions (Embedded Web Server, Embedded Streaming Server, Network Protocol) developed by SamsungTechwin, and guarantees performance and safety while offering various solutions through Internet integration.

1.2. Features

○ **30X Zoom Lens with Auto-Focus Function**

The 30X zoom lens having Auto-focus function magnifies the image up to 240 times when used with the digital 8X zoom function.

○ **Variable Auto Surveillances**

- **Individual Preset Saving mode**

11 camera adjustment function can be saved independently in each Preset menu to provide optimum images.

- **Image Hold**

Images can be held while moving between Presets to reduce

visual fatigue of observers.

- **Various Protocols**

Five different makers protocols are supported: Samsung Techwin, Pelco, Samsung Electronics, Panasonic and Vicon.

- **PTZ Tracking**

4 patterns operated with the joystick can be saved and replayed by users.

- **Auto Swing**

Pan or Tilt is operated in sequence between 2 designated positions.

- **Group Search**

Maximum 128 Preset positions are toured in order.

- **Tour Search**

Maximum 6 Group Search functions are toured in order.

- **Smart P/T**

Even when the Zoom-In function is On for the Pan and Tilt speed correction function linked to the zoom position, fine manual operation is possible.

- **Day & Night**

Day & Night function of ICR(IR Cut-Filter Removal) and Sens-Up function can achieve optimum images during day and night.

*Sens-Up function improves the CCD sensitivity by lengthening the exposure time using electricity.

*Day & Night function enables users to select and adjust the color and black and white images according to the light level.

128 Preset Position

A maximum of 128 Preset positions can be set up. This function enables users to set up the monitoring place any time..

○ Digital Flip

When you want to monitor the moving object below the camera, you can execute the Digital Flip using the Web-page or Viewer. The moving object can be monitored without screen reverse.

○ Area Masking

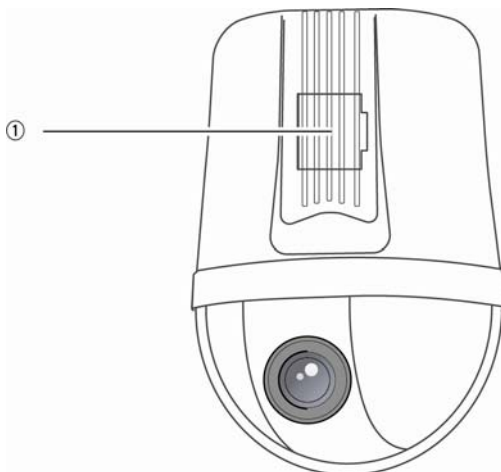
For privacy protection, a maximum of 8 areas can be masked among the surveillance areas preventing them to be displayed on the screen.

○ High Data Compression ratio

With high data compression ratio based on MPEG-4, transmission speed is fast and relatively large number of frame can be transmitted on the same network bandwidth.

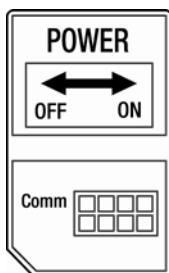
Ch2. Section names and functions

2.1. Body

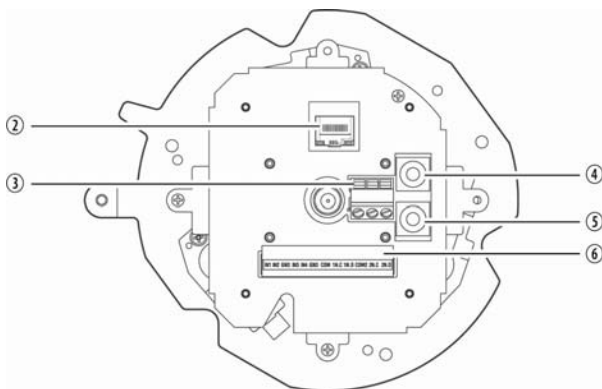


① POWER Switch

Power ON/OFF. (Factory setting : OFF)



2.2. Camera Holder



② **RJ-45 ETHERNET Connection Input**

③ **AC 24V Input**

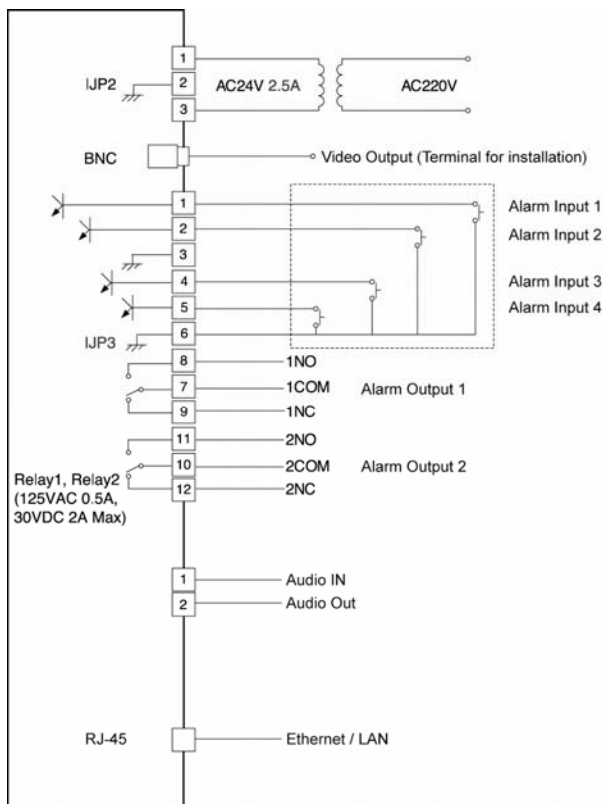
④ **AUDIO INPUT**

⑤ **AUDIO OUTPUT**

⑥ **Alarm Connection Input**

1. IN1	2.IN2	3.GND	4.IN3
5.IN4	6.GND	7.COM	8.1N.O
9.1N.C	10.COM2	11.2N.O	12.2N.C

2.3. Camera Holder connection



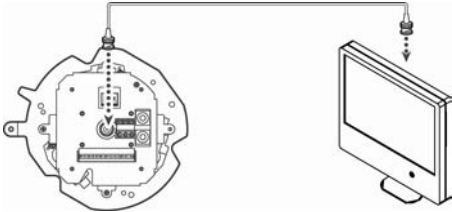
Alarm Connection Terminal(Camera Holder)

	NAME	Purpose
UP3-#1	IN1	Alarm input sensor connection terminal1
UP3-#2	IN2	Alarm input sensor connection terminal2
UP3-#3	GND	GND
UP3-#4	IN3	Alarm input sensor connection terminal3
UP3-#5	IN4	Alarm input sensor connection terminal4
UP3-#6	GND	GND
UP3-#7	COM1	Alarm Output1 Common
UP3-#8	1N.O	Alarm Output1(for Normal Open)
UP3-#9	1N.C	Alarm Output1(for Normal Close)
UP3-#10	COM2	Alarm Output1
UP3-#11	2N.O	Alarm Output2(for Normal Open)
UP3-#12	2N.C	Alarm Output2(for Normal Close)

Ch3. Installation and Network Setup

3.1. Connecting to Monitor (For installation)

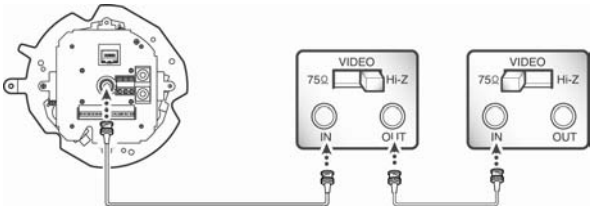
Please connect the video output terminal located on the back of the camera to the monitor.



30X PTZ Network Camera SNP-3300

Monitor

- The connection method varies depending on the type of monitor and accessories. Please refer to the user's manual for each instrument.
- Please turn off the power when connecting.
- Please select Hi-Z on the 75Ω/Hi-Z switch for the intermediate video TV set and select 75Ω for the Intermediate device as shown in the picture below.



30X PTZ Network Camera SNP-3300

Intermediate

End monitor



Caution

- This product is the network camera which transmits video through network, video output terminal is for installation and used to determine imaging range when installing the product.
 - It could have a trouble, like a falling-off in video quality, if you use for monitoring.
-

3.2. Connecting to Power

AC24V 2.5A can be used for the input power of this product. Connect the Power Adapter Cable. Use a driver (-) to screw one part of the Power Adapter consisting of two lines to the holder.



Connect the Power Adapter's plug to the Power Outlet.

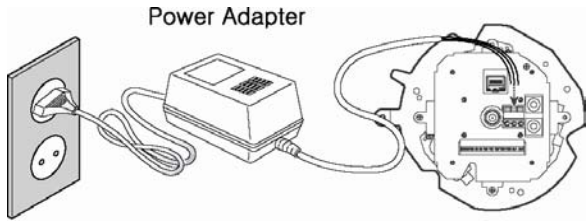


Table 3-1. When the resistance value of copper wire is at [20℃ (68°F)]

Copper wire size (AWG)	#24 (0.22mm ²)	#22 (0.33mm ²)	#20 (0.52mm ²)	#18 (0.83mm ²)
Resistance value (Ω/m)	0.078	0.050	0.030	0.018
Voltage drop(V/m)	0.028	0.018	0.011	0.06

- As shown in the Table3-1, voltage decreases as the wire gets longer. Therefore use of an excessively long adaptor output line for connection to the camera may affect the performance of the camera.
- ※ Standard voltage for camera operation: DC 12V±10%, AC 24V±20%
- ※ There may be some deviation in voltage drop depending on the

3.3. Installation of SNP-3300

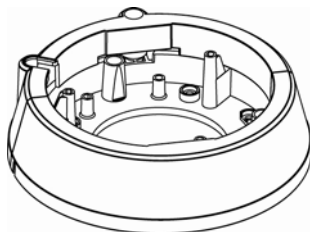
■ Installation Precautions

- Check out the installation place. It should be strong enough to support more than 4 times the total product weight including 30X PTZ Network Camera (SNP-3300) and installation structure.
- Install the camera in a place having more than 500mm of space above the ceiling board.
- Install the camera holder using the provided installation guide tab, screw and fastening cable.
- There is a risk of camera falling during installation. Prevent the fall using the fastening cable while installing the camera. Also, access of other people to the place should not be allowed during installation.

■ Accessories Sold Separately

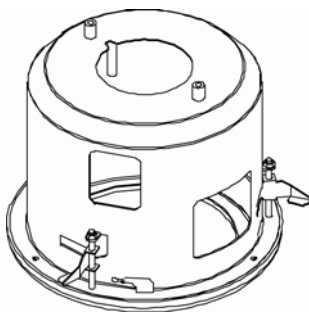
Use the following accessories sold separately for convenient installation

- Ceiling Bracket(STB-330PC)
This mount is used to install the camera on the ceiling.



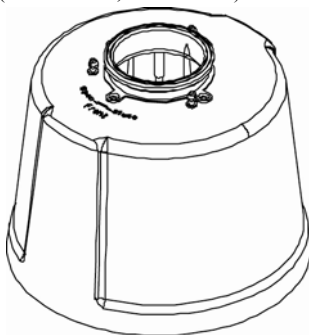
- **Embedded Housing(STH-330PEV)**

This housing is used to attach the speed dome camera to the ceiling for installation.



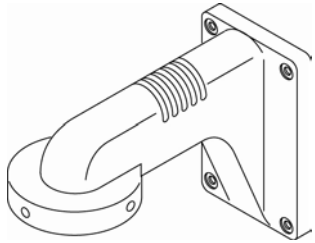
- **Indoor and Outdoor Housing(STH-330PIV, STH-320PO)**

This housing is used to attach the speed dome camera to the ceiling for installation.



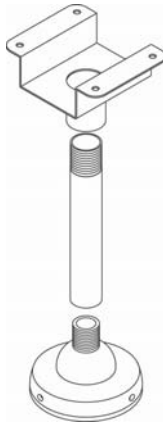
- Wall Bracket(STB-270PWV)

This item is used to install the indoor or outdoor housing for speed dome on the wall.



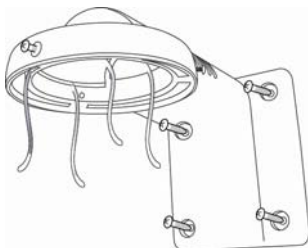
- Pendant Bracket(STB-496PPV)

This item is used to install the indoor and outdoor housing for speed dome on a concrete ceiling.

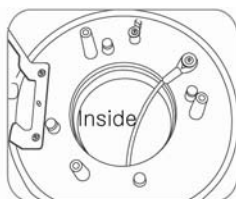
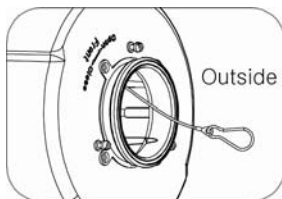


■ Camera Installation(Outdoor Housing)

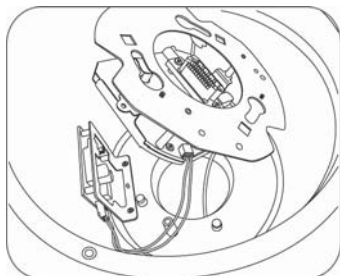
1. Fasten the ceiling mount on the ceiling.



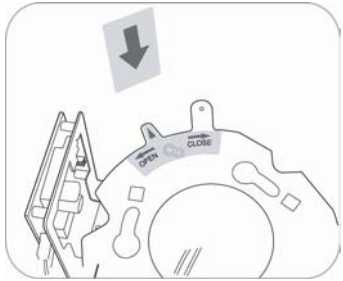
2. Pull outside of the housing the safety wire fastened to the outdoor housing.



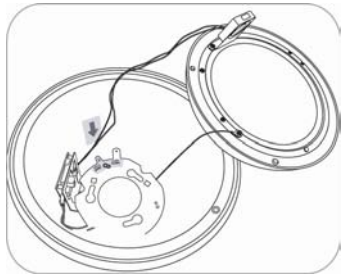
3. Match the arrow sign marked on the camera holder to the arrow marked inside the housing and then install the camera holder in the housing.



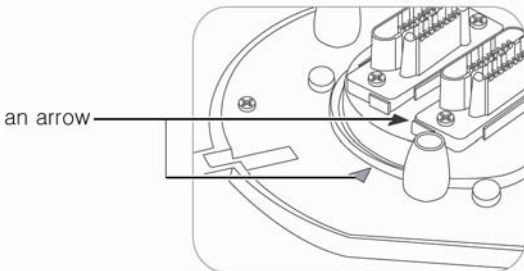
4. Match the arrow sign marked on the camera holder to the arrow marked inside the housing and then install the camera holder in the housing.



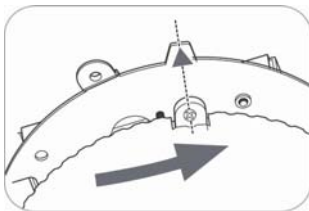
5. Connect the heater and fan cables within the housing to the fan heater PCB.



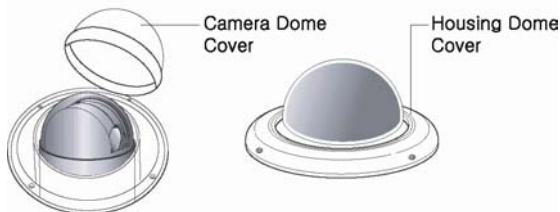
6. Adjust and make the arrows marked on the bottom of the camera body face each other.



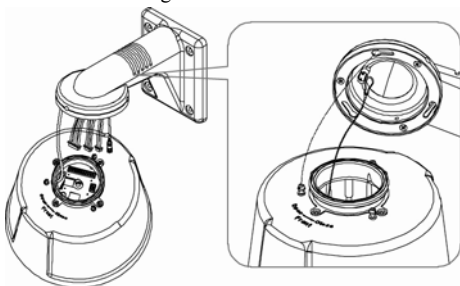
7. Insert the camera into the housing by matching the installation pin on the bottom of the camera and the arrow inside the housing, and then fasten the camera by inserting into the fastening hole, turning the screw clockwise for fastening.



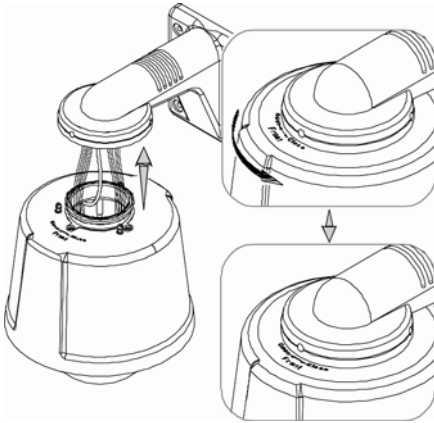
8. Remove the camera dome cover and then the attach the housing dome cover.



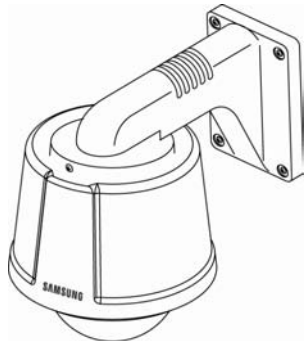
9. Connect the housing safety wires to the fixture inside the mount installed on the ceiling.



10. Connect the video cable, LAN cable and the power adapter cable to the camera holder.



11. Check out the connection of all parts and the camera and install the completed outdoor housing on the ceiling mount.





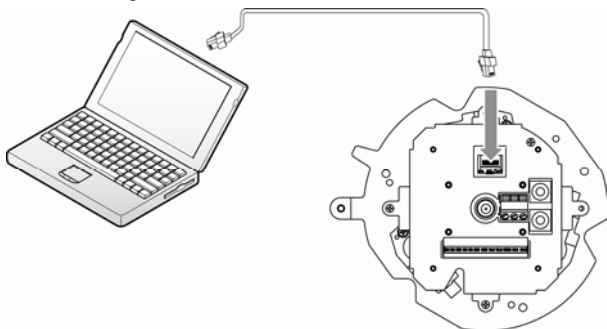
Caution

- Check out the input voltage of the power adapter before connecting the power.
 - For an installation without housing, the camera can be installed with installation template, fastening the cable and screw provided separately.
 - It is necessary to tighten the screw to prevent unfastening.
 - If the screw to prevent unfastening is not tight, the camera installed may fall due to vibration or shock from the environment.
-

3.4. Network configuration and connection method using Web page

Use when there is one 30X PTZ Network Camera SNP-3300 to be installed.

1. Please connect user's PC to 30X PTZ Network Camera SNP-3300 using cross cable.

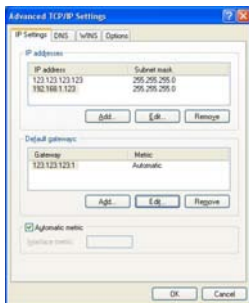


Note

To configure network, the internal IP must be registered in the user's PC.

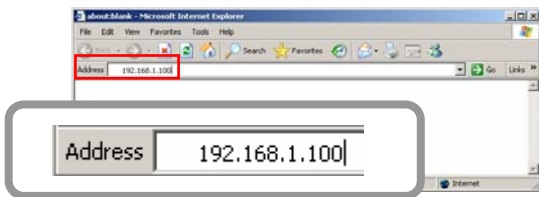


- After pressing internet protocol (TCP/IP) properties, press the 'advanced' button to go into advanced configurations.



Add with 192.168.1.XXX.

2. Please launch a Web browser on user's PC and enter [192.168.1.100] in the URL address field and push <Enter> button. Connect to Webviewer login window of 30X PTZ Network Camera SNP-3300.



3. Please login with administrator's authorization and move to 'Setup-Network' page.



Note

Default value is ID : admin, PW : 11111111

4. Please configure according to the network environment where 30X PTZ Network Camera SNP-3300 will be installed and push <Save> button to save the configuration.

iPOLiS **Network Setup**

Network Configuration

☒ LAN

IP Address: 192 . 168 . 1 . 251
 NetMask: 255 . 255 . 255 . 0
 Gateway: 192 . 168 . 1 . 1
 DNS1: 168 . 126 . 63 . 1
 DNS2: 168 . 126 . 63 . 2

☐ xDSL

User Name:
 Password:

☐ DHCP

Port/DNS Configuration

Connection Port: 4000 (default: 4000)
 HTTP Port: 80 (default: 80)
 FTP Port: 21 (default: 21)
 Use DDNS: ☐ Enable ☒ Disable

Save **Cancel**

Live
Basic
Network
User
Pan/Tilt/Zoom
Motion Detection
Alarm/Sensor
Time
Log
Upgrade
System Reboot
Log Out

① LAN / xDSL/ DHCP Configuration

<input checked="" type="radio"/> LAN	+ IP Address	192	.	168	.	1	.	120
	+ NetMask	255	.	255	.	255	.	0
	+ Gateway	192	.	168	.	1	.	1
	+ DNS1	160	.	126	.	63	.	1
	+ DNS2	160	.	126	.	63	.	2
<input type="radio"/> xDSL	+ User Name	<input type="text"/>						
	+ Password	<input type="text"/>						
<input type="radio"/> DHCP								

Item	Description
LAN Use	When network product is connected to normal local LAN or when connected to static IP, the network data to be allotted to the IP is configured.
xDSL	When using xDSL dynamic IP, enter the ID and PW.
Video Quality	When automatically receiving IP through DHCP server, the DHCP functions are activated. 'DHCP' is used in the LAN environment where the DHCP is activated. Generally, for mid/large scale, DHCP servers are operated through LAN and for small-scales, IP sharers use DHCP functions.

② Port Configuration

Port/DDNS Configuration	
+ Connection Port	4000 (default: 4000)
+ HTTP Port	80 (default: 80)
+ FTP Port	21 (default: 21)
+ Use DDNS	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

Item	Description
Port Setting	The connection port and http, ftp port configurations can be set here and the DDNS use can be checked.



Note

Use DDNS changes its IP address every time the user attempts to connect to the ISP and when the product is connected to a cable modem or xDSL modem. In this case, the user cannot know the changed IP address. When a product that uses dynamic IP is registered on the DDNS server, when wishing to connect to the product, the changed IP address can be easily recognized. In order to register the IP address to the DDNS server, set Use DDNS as Enabled.

Ch4. How to Use Web Viewer

4.1. How to Use Web Viewer

4.1.1. Login

To connect to the login page, enter network camera IP address on the internet web browser and press the enter key.



Enter user ID and password and push <Login> button, it then moves to the appropriate Web page.



Note

Default value is ID: admin, PW: 11111111

If you click <Guest> button, it moves to WebViewer page under the Guest authenticated status. However, administrator has to permit guest access for this.



Note

If you logged in first in administrator mode, please change the password of administrator. It can prevent other users from connecting to the administration page.

4.1.2. Web Viewer screen

Web Viewer screen is composed of menu area for camera/video configuration and screen area for displaying input video from camera.



■ Controls



Flip Image

Vertical reversal of channel screen





Stretch Image

When selecting resolution with Half D1 and CIF, stretches channel screen to resolution D1 size.



Save Image

Saves channel screen to 'JPEG file'.



Quad

Converts to 4 split screens (applied only to 4 channel server).



Channel

Video server channels (applies only to 4channel servers)

- CH1~CH4

Compression

Video compression mode (the mode of compressing video)

- MPEG, JPEG

Resolution

Video resolution (the size of video screen transmitted)

- NTSC : D1(704x480), Half D1(704x240), CIF(352x240)
- PAL : D1(704x576), Half D1(704x288), CIF(352x288)

Frame Rate

The number of maximum video frame transmitted for each second.

- 1, 5, 10, 15, 20, 25, 30

Quality

Quality Configures video quality

- Very High, High, Normal, Low, Very Low



Pause

Stops video for a while.



OSD

Displays related information.



Displays the title



Removes the title



Deinterlace

On/off function of Deinterlace.



Screen where
Deinterlace is not
applied



Screen where
Deinterlace is not
applied



Note

Deinterlace is a function to adjust the video quality softly by eliminating the border line which was made by an interlace function. The interlace function draws an even line and an odd line of the Image one after the other.



Camera Setup

Displays OSD control button of camera.



Camera OSD control button is displayed



Camera OSD is displayed



Day&Night

Day&Night configuration function (Color, B/W configuration)



PTZ Control

PTZ control function



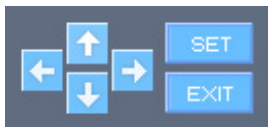
Screen where camera PTZ control window is displayed

**Note**

The left/right slide bar can control focus (left slide bar) / zoom (right slide bar)

The “+” displayed in the middle can be pressed using the mouse as the base point of the Pan / Tilt and it will Pan /Tilt according to that point.

Instruction for Camera OSD control button

**<↑>, <↓> button**

Moves selection displaying arrows up and down on camera OSD menu.

<←>, <→> button

Changes configuration of selected field on camera OSD menu.

<Set> button

Displays camera OSD or moves to upper/lower menu of selected field.

<Exit> button

Terminates camera OSD.

For configuring the function and detail operating method of 30X PTZ Network Camera SNP-3300, refer 'Ch5. How to Operate Camera'.

4.2. Using Administration page

4.2.1. Initialization Screen after Connecting

When connection is successful, the below screen will be displayed.

The screenshot displays the iPOLiS administration web interface. On the left is a vertical sidebar with icons and labels for various functions: Live, Basic, Network, User, Pan/Tilt/Zoom, Motion Detection, Alarm/Sensor, Time, Log, Upgrade, System Reboot, and Log Out. The main content area is divided into two sections. The top section, titled 'Video/Audio Setup', contains several configuration options: Compression Type (radio buttons for MPEG and JPEG), Video Size (radio buttons for NTSC and PAL, with a dropdown for D1), Video Quality (a dropdown menu set to 'Very High'), Video Frame Rate (a dropdown menu set to '30fps'), Video Channel (a checkbox for 'Channel 1'), Audio-In Channel (a checkbox for 'Channel 1'), Audio-Out Channel (a checkbox for 'Use'), Max User Count (a dropdown menu set to '10'), and Mic. Sensitivity (radio buttons for High and Low). The bottom section, titled 'Product Information', contains text input fields for Model (SNP-3300), Mac Address (00:09:1B:1F:1F:0E), Camera Name (SNP-3300), Location (Location), Description (Description), and Memo (Memo). Each of these fields has a note '(English Only)' to its right. At the bottom right of the main content area are two buttons: 'Save' and 'Cancel'.

Video/Audio Setup	
Compression Type	<input checked="" type="radio"/> MPEG <input type="radio"/> JPEG
Video Size	<input checked="" type="radio"/> NTSC <input type="radio"/> PAL D1
Video Quality	Very High
Video Frame Rate	30fps
Video Channel	<input checked="" type="checkbox"/> Channel 1
Audio-In Channel	<input checked="" type="checkbox"/> Channel 1
Audio-Out Channel	<input checked="" type="checkbox"/> Use
Max User Count	10
Mic. Sensitivity	<input checked="" type="radio"/> High <input type="radio"/> Low

Product Information	
Model	SNP-3300
Mac Address	00:09:1B:1F:1F:0E
Camera Name	SNP-3300 (English Only)
Location	Location (English Only)
Description	Description (English Only)
Memo	Memo (English Only)

Save Cancel

4.2.2. Live

Please Move to Web Viewer page



[Web Viewer live screen]

4.2.3. Basic

Configures basic information for camera.

The screenshot shows the iPOLiS administration interface. On the left is a sidebar with navigation icons and labels: Live, Basic (selected), Network, User, Pan/Tilt/Zoom, Motion Detection, Alarm/Sensor, Time, Log, Upgrade, System Reboot, and Log Out. The main content area is divided into two sections. The top section, 'Video/Audio Setup', contains the following settings: Compression Type (radio buttons for MPEG and MPEG, with MPEG selected), Video Size (radio buttons for NTSC and PAL, with NTSC selected and a D1 dropdown), Video Quality (dropdown menu set to Very High), Video Frame Rate (dropdown menu set to 30fps), Video Channel (checkbox for Channel 1, which is checked), Audio-In Channel (checkbox for Channel 1, which is checked), Audio-Out Channel (checkbox for Use, which is checked), Max User Count (dropdown menu set to 10), and Mic. Sensitivity (radio buttons for High and Low, with High selected). The bottom section, 'Product Information', contains the following fields: Model (text box with SNP-3300), Mac Address (text box with 00:09:1B:FF:FF:00), Camera Name (text box with SNP-3300, with a note '(English Only)'), Location (text box with Location, with a note '(English Only)'), Description (text box with Description, with a note '(English Only)'), and Memo (text box with Memo, with a note '(English Only)'). At the bottom right of the Product Information section are 'Save' and 'Cancel' buttons.

Video/Audio Setup

Item	Description
Compression	Video compression mode (Compression mode of video in the camera)
Video Size	If the type of installed camera (NTSC/PAL) is selected, then the size of screen on the camera becomes selectable.
Video Quality	Selects the quality of video screen. In case of low speed internet, lower the video quality to see seamless video.

Item	Description
Video FrameRate	Configures the number of transmitted frame per second in the camera.
Video Channel	Selects the video channel to be used in the camera.
Audio-In Channel	Selects whether to use the audio input channel in the camera or not.
Audio-Out Channel	Selects whether to use the audio output in the camera or not.
Max User Count	Configures the number of users who can be connected to the camera through the network(1~20 persons)
Mic. Sensitivity	Audio amplifying function onfigures Low for the microphone which has amplifying function and High for the microphone which has no amplifying function. (In case of Line-In signal, configure Low)

Product Information

Item	Description
Model	Displays model name of the camera.
Mac Address	Displays MAC Address of the camera.
Camera Name	onfigures name of the camera, it help to classify several cameras.
Location	The location of the installed camera can be entered.
Description	Additional description related to the camera can be entered.
Memo	The contact of camera administrator can be entered.

4.2.4. Network

Configures network information of the camera.

Network Configuration

According to the user's network environment, it is classified into LAN, xDSL, DHCP.

Item	Description
LAN	In case the camera is connected to the local network or xDSL with a static IP address, configure network information to be assigned to the camera.
xDSL	In case of xDSL with a dynamic IP address, enter password in UserName and Password field.
DHCP	This case is selected in case of using IP sharing box/ cable modem.

Port/DDNS Configuration

Item	Description
Connection Port	This controls communication with camera. (Default : 4000)
HTTP Port/ FTP Port	This helps to connect to web page or FTP server. (Default : http=80, ftp=21)
Use SWR	Select if use of SWR function is available. The way of connection which used ID does not support.
Use DDNS	Select if DDNS server is available. DDNS server is connected to server without reference to changed IP because there is possibility that floating IP constantly is changed.

※ A detailed explanation about DDNS usage refers to <Appendix A. DDNS Usage>.

4.2.5. User

This describes password change for administrator or user registration.

iPOLiS User Setup

Administrator Password Change

Type:

Re-Type:

Guest Setup

Guest Access: ☒ Permission: ☒

Current Users

User Name	Password	Control Level	Use
aaaaaaa	*****	<input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Controls <input checked="" type="checkbox"/> Audio-In	<input checked="" type="checkbox"/>
bbbbbbb	*****	<input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Controls <input checked="" type="checkbox"/> Audio-In	<input checked="" type="checkbox"/>
ccccccc	*****	<input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Controls <input checked="" type="checkbox"/> Audio-In	<input checked="" type="checkbox"/>
ddddd	*****	<input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Controls <input checked="" type="checkbox"/> Audio-In	<input checked="" type="checkbox"/>
eeeeeee	*****	<input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Controls <input checked="" type="checkbox"/> Audio-In	<input checked="" type="checkbox"/>

0 Controls = Pan / Tilt / Camera / Audio-Out / Alarm-Out

Item	Description
Administrator Password Change	Change password of administrator
Guest Setup	User clicks 'Guest' button to decide whether allowing guest to connect Main Viewer.
Current User	You can register new user or delete, and set up user's authority.

※ Set up user authority

User's authorities set up at 'Current User' are as follows.

Item	Description
Video	Use video related setup function (Compression, Resolution, Framerate, Quality)
Control	Pan, Tilt, Zoom, Audio output, Alarm output
Audio	Audio Input
USE	Whether relevant account is used (If not checked, not allowed log-in)

Example 1) In case control function is limited (Do not check Controls box)



※ Pan, tilt, zoom, audio output, alarm output function icon is inactivated

Example 2) In case video function is limited (Do not check Video)



※ Compression, Resolution, Framerate, Quality set up icon is inactivated.

4.2.6. Pan/Tilt/Zoom

Configures PTZ Swing and Preset of the camera.

The screenshot displays the iPOLiS PTZ Setup interface. On the left is a sidebar with navigation options: Live, Basic, Network, User, **Pan/Tilt/Zoom**, Motion Detection, Alarm/Sensor, Time, Log, Upgrade, System Reboot, and Log Out. The main content area is titled "Pan/Tilt/Zoom Setup" and contains three sections:

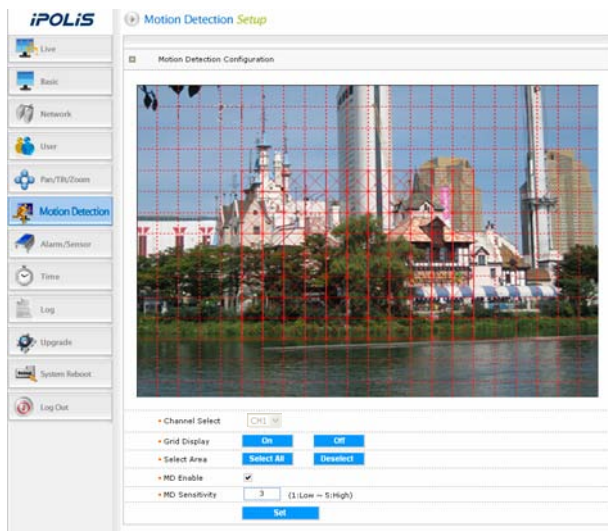
- PTZ Camera Configuration:**
 - Channel: CH1
 - PTZ Display: On/Off
 - OSD Display: On/Off
 - Buttons: Move, Set, Delete, Delete All, Pan Swing, Tilt Swing, Stop, Run, Stop
- Swing Setup:**
 - First Preset: [] Second Preset: []
 - Mode: Pan Swing
 - Speed: 64
 - Duration: 3
 - Buttons: Save, Cancel
- Group Setup:**
 - Group No.: 1
 - Preset No.: 1
 - Travel Speed: 64
 - Dwell Time: 3
 - Buttons: Add, Set, Clear

A live video feed of a cityscape is visible in the PTZ Camera Configuration section.

Item		Description
PTZ Camera Configura tion	Channel	Select the channel of camera.
	PTZ Display	Display PTZ menu.
	OSD Display	Display OSD.
	Preset	Set or delete(delete, delete all) the Preset. Screen move the position of Preset.
	Swing	Surveille Pan/Tilt Swing at the position of preset, set up the swing menu.
	Group	Surveille repeatedly at the position of preset, set up the Group menu.
Swing Setup	First Setup	Indicate the first position of surveillant Preset
	Second Setup	Indicate the second position of surveillant Preset
	Mode	Select Pan/Tilt Mode.
	Speed	Set Swing speed between Presets.
	Duration	Set interval time on Preset.
Group Setup	Group No.	Set Group Number among 1~6
	Preset No.	Set Preset included the Group.
	Travel Speed	Set swing Speed between preset.
	Dwell Time	Set interval time on Preset.

4.2.7. Motion Detection

This sets up motion detection function of camera.



Item	Description
Grid Display	Basic grid, used to choose area on the screen, is displayed or hidden.
Select Area	When selecting motion detection area, click <Select All> button to select all areas, or click <Deselect> button to cancel the selected area.
MD Enable	Decide whether you use motion detection function.
MD Sensitivity	Setting up sensitivity to detect motion to adjust input video by situation. You can select 1-5, and 5 is the highest.

4.2.8. Alarm/Sensor

This sets up necessary information when using alarm function by attaching sensor to camera.

iPOLiS
 Live
 Basic
 Network
 User
 Pan/Tilt/Zoom
 Motion Detection
 Alarm/Sensor
 Time
 Log
 Upgrade
 System Reboot
 Log Out

Alarm/Sensor Setup

Digital In(Sensor) Setup

Sensor No.	Sensor1	Sensor2	Sensor3	Sensor4
Sensor Type	Normal Open	Normal Open	Normal Open	Normal Open

Digital Out(Alarm) Setup

	Sensor1	Sensor2	Sensor3	Sensor4	MD
R1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
R2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Duration	5 sec				
Goto Preset	N/A	N/A	N/A	N/A	
FTP	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-Mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FTP/E-mail Setup

FTP Setup

FTP Server Name:

Home Directory:

User ID:

User Password:

E-Mail Setup

Recipient E-mail Address 1:

Recipient E-mail Address 2:

SMTP Server Name:

User ID:

User Password:

Mail Subject: SNP-3300Message (English Only)

Mail Body: SNP-3300Event (English Only)

Alarm/Sensor Setup

◇ Digital In Setup

Item	Description
Sensor Type	Types of sensors are 'Normal open' and 'Normal close.' This selects up type of connected sensor.

◇ Digital Out Setup

Item	Description
Alarm	Set up Alarm Out responding when event is recognized by connected sensor (Sensor 1) or Motion Detection (MD)
Duration	Set up time to operate relay. It means the period from the time when sensor detects event to the time when relay is released.
FTP	In case event occurs by sensor (Sensor 1) or Motion Detection (MD) on the screen, decide whether transferring related information to FTP.
E-mail	In case event occurs by sensor (Sensor 1) or Motion Detection (MD) on the screen, decide whether transferring related information by e-mail.

E-mail/FTP Setup

Set up FTP server and e-mail information to which related information is transferred in case alarm occurs.

Item		Description
Mode		Select media for data transfer.
FTP	Server Name	Enter domain or IP address of FTP server.
	Home Directory	Set up home directory to save relevant data at FTP server.
	User ID	Enter ID to connect FTP server.
	User Password	Enter PW to connect FTP server.

Item		Description
E-mail	Recipient E-mail Address 1 Recipient E-mail Address 2	You can designate up to two e-mail address receiving data when alarm occurs.
	Server Name	In case you use outside e-mail server, enter the name of the outside e-mail server.
	ID	Enter ID to connect the outside e-mail server.
	Password	Enter PW to connect the outside e-mail server.
	Mail Subject	Enter the subject of mail to be transferred.
	Mail Body	Enter the body of mail to be transferred.

**Note**

If motion is detected, the contents transferred by e-mail or to FTP are varied according to the set-up of 'Video Compression' at Admin page (Basic).

- MPEG : Video length is set by 'Duration' of 'Digital Out Setup'.
File extension is 'ste', you can play this by supplied Player.
- JPEG : JPG type image file attached.

4.2.9. Time

Current Time

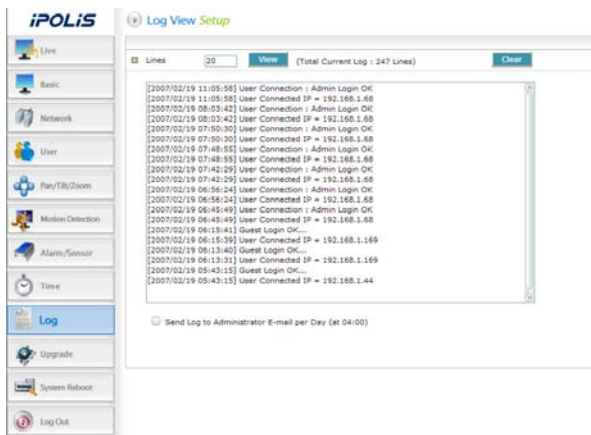
Item	Description
Date	Current setup date displayed
Time	Current setup time displayed

Time Setup

Item	Description
Set Manually	Adjust time manually.
Time Server	Set up address of time server for Server 1 - 5.

4.2.10. LOG

Recent activities made for camera are displayed as log.



Item	Description
Lines	Set up number of lines of the list.
View	Log is viewed with number of lines you set up most recently.
Clear	Delete logs.

4.2.11. Upgrade

Upgrade program of 30X PTZ Network Camera SNP-3300.

The screenshot shows the iPOLiS web interface. On the left is a sidebar menu with options: Live, Basic, Network, User, Pan/Tilt/Zoom, Motion Detection, Alarm/Sensor, Time, Log, Upgrade (highlighted), System Reboot, and Log Out. The main content area has two sections:

- System Upgrade Configuration:** Contains a table with three rows:

Firmware/Web	<input type="text"/>	<input type="button" value="찾아보기..."/>	<input type="button" value="Save"/>
Firmware Version	0.2.3		
WebPage Version	0.2.3		
- Factory Reset Setup:** Contains a table with one row:

Factory Mode	<input type="button" value="Reset"/>
--------------	--------------------------------------

System Upgrade Configuration.

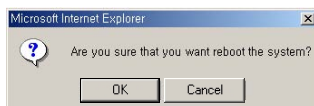
Item	Description
Firmware/Web	Upgrade firmware and Web-page of 30X PTZ Network Camera SNP-3300.

Factory Mode Setup

If you click <Reset> button, server is returned to initial value when shipped from the factory after confirmation procedure by administrator.

4.2.12. System Reboot

Server is rebooted after confirmation procedure of administrator.



Click <OK> button to reboot server.

Ch5. How to Operate Camera

5.1. OSD Menu Organization

Dome camera can be set up on the OSD(On Screen Display) menu displayed on the video monitor by Network.

Menu	Function	Menu	Function
TILT UP	Move up on the OSD menu	PAN LEFT	Move left on the OSD menu
TILT DOWN	Move down on the OSD menu	PAN RIGHT	Move right on the OSD menu

① Camera Setting

P1	P2	P3	P4	Defaults
	①Focus	①Focus Mode	Auto/Manual/One Shot AF	OneShot AF
		②Zoom Tracking	Mode: On/Off	ON
			Speed: Slow/Fast	Fast
	②White Balance	③Digital Zoom	Off/2X/4X/8X	OFF
		AWB Mode	ATW/AWC/MANUAL	ATW
			►ATW	
			-ATW(I): Indoor	
			-ATW(O): Outdoor	
			►Manual	
			-Temperature	
			2000K/3200K/5100 K	3200
			-Red	100
			-Blue	100
	③Exposure	①Brightness	50	050
		②Iris	Auto	Auto
			Manual: Iris Level	050
		③Shutter	---	ESC
			A.FLK	
			Manual: 1/60~1/120, 000, x2~x128	1/60
	④Back Light	④Sens-Up	Auto: Sens-Up Limit	X4
			x1~x128	
				ESC
	⑤AGC	WDR	WDR Limit: High/Middle/Low	Middle
		Off		OFF
	⑥SSNR	High/Middle/Low/Off		Middle
		High/Middle/Low/Off		MIDDLE
	⑦Day & Night	Auto		
		B/W	B/W Burst: On/Off	Burst ON
		Color	Burst Level	150

P1	P2	P3	P4	Defaults
	⑧Others	①Sync	Internal	
			Line Lock: Line Lock Phase	225
		②Image Adj.	Tone	005
			Sharpness	050
			Color	050
		③Freeze	On/Off	Off

② Sequence Setting

P1	P2	P3	P4	초기값
	①Preset	①Setting ②Edit ③Execute ④Clear ⑤Status		
	②Swing SEQ	①Pan Swing	①Setting ②Execute ③Clear	
		②Tilt Swing	①Setting ②Execute ③Clear	
		③P/T Swing	①Setting ②Execute ③Clear	
	③Group SEQ	①Group1	①Setting ②Execute ③Clear	
		②Group2	①Setting ②Execute ③Clear	
		③Group3	①Setting ②Execute ③Clear	
		④Group4	①Setting ②Execute ③Clear	
		⑤Group5	①Setting ②Execute ③Clear	
		⑥Group6	①Setting ②Execute ③Clear	
	④Tour SEQ	①Setting ②Execute ③Clear		
	⑤PTZ Trace	①Trace1	①Replay ②Memorize	
		②Trace2	①Replay ②Memorize	
		③Trace3	①Replay ②Memorize	
		④Trace4	①Replay ②Memorize	
	⑥Auto Run	①Mode	①Off	OFF
			②Preset: Preset No	
			③Swing: Swing Mode Pan/Tilt/P&T	
			④Group: Group No	
			⑤Tour	
			⑥Trace: Trace1~Trace4	
			⑦A.Pan - ①Auto Pan Speed: 20~50 - ②Tilt Angle: 10~45	32 25
		②Time	1~59(Sec), 1~59(Min)	30sec
	⑦Power On Resume	On/Off		OFF

③ P/T Setting

P1	P2	P3	P4	초기값
	①Pan Limit	①Position ②ON/OFF		
	②Tilt Limit	①Position ②ON/OFF		
	③Area Setting	①Area1	①Area Name ②Position ③ON/OFF	
		②Area2		
		③Area3		
		④Area4		
		⑤Area5		
		⑥Area6		
		⑦Area7		
		⑧Area8		
	④Area Masking	①Mask1	①Position ②ON/OFF	
		②Mask2		
		③Mask3		
		④Mask4		
		⑤Mask5		
		⑥Mask6		
		⑦Mask7		
		⑧Mask8		
	⑤Prop.P/T	ON/OFF		ON
	⑥Digital Flip	ON/OFF		ON
	⑦Image Hold	ON/OFF		OFF

④ OSD Setting

P1	P2	P3	P4	초기값
	①Camera Name	①Edit ②ON/OFF		
	②Preset Number	ON/OFF	ON	
	③Preset Name	①Edit ②ON/OFF		
	④Sequence Status	ON/OFF	ON	
	⑤Area Name	ON/OFF		OFF
	⑥PTZ Position	ON/OFF		ON
	⑦Language	English/中文		English

⑤ Initialize

P1	P2	P3	P4	초기값
	①Power On Reset	①Cancel ②Execute		
	②Factory Default Set	①Cancel ②Execute		
	③Camera Default Set	①Cancel ②Execute		
	④Auto Refresh	OFF, 1~7Days		OFF

⑥ Status

P1	P2	P3	P4	초기값



Note

Preset setting is only possible on the OSD menu or using the Webpage.



Note

Symbol Description

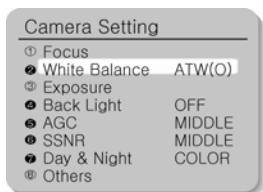
- When there are sub menus under the selected OSD menu.
Numbers are displayed in white color like ① on the right top of the screen.
- When there is no sub menu under the selected OSD menu.
Numbers are displayed in black color like ① on the right top of the screen.

5.2. Camera Setting

5.2.1. White Balance

The White Balance function corrects the abnormal white color into the normal white color under any color temperature lighting.

Select the mode among ATW, AWC and Manual. ATW is selected by default.



■ WB Mode

- ATW

Balances the color automatically depending on the source of light from 1,800~10,500K color temperature

- Indoor[ATW(I)] : Use this mode in the area under the limited color temperature.
- Outdoor[ATW(O)] : Use this mode in the area under the broad color temperature.

- AWC:

Set up the lighting to the objects and corrects the right color temperature to that of a white object. Camera works under the setup conditions. For the most appropriate condition under the current illumination, capture the white paper and then change the mode into AWC. Press the Enter key and then AWC Start will be displayed. When the adjustment is completed after pressing the Enter key for AWC Start, go to the upper menu. When conditions change, adjust the white balance function again

- Manual

Fine tuning is possible through this manual control mode. Select the color temperature and increase or decrease the Red or Blue values to shift the color of the object.

Temperature: Select one temperature among 2,000K, 3,200K and 5,100K.

- Red: Red Gain can be changed.
- Blue: Blue Gain can be changed.



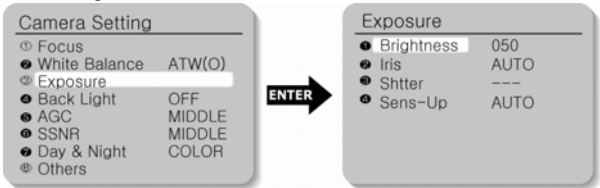
Note

White Balance may not function properly under the following conditions.

- When the color temperature surrounding the object is very high. (e.g. clear sky or sunset)
- When it is dark around the object.
- When the camera is pointing towards a fluorescent lamp directly or when lighting conditions change a lot.

5.2.2. Exposure

Camera exposure can be controlled.



① Brightness

The brightness of the screen can be adjusted.

② Iris

Auto mode or manual mode can be selected.

- Auto: The brightness of the image signal can be adjusted automatically depending on the amount of light.
- Manual: The brightness of the image can be adjusted.

③ Shutter

- ---: Electronic shutter mode is enabled. The shutter speed is controlled automatically according to the brightness of the screen.
- A.FLK: Use this mode when the screen flickers because of inconsistent frequency with the surrounding lights.
- Manual
 - Select any function you wish to operate by using the UP and DOWN buttons.
 - Shutter speed can be adjusted from 1/60 second to 1/120,000 second.
 - Sens-Up function can be operated manually from x2 ~ x128.



Note

- Do not use this function with WDR or Back Light menu at the same time for effective A.FLK function.
 - If the Shutter mode is ESC in the inner synchronization mode and the camera faces to the bright fluorescent lamp directly, the image may be unstable. Be careful to select the installation location.
 - If the Manual or A.FLK mode is selected for the Shutter menu, the Sens-Up function is disabled.
-

4 Sens-Up

- Auto: The low light level of the night or dark condition is detected automatically and the bright and clear image can be maintained.
 - Sens-Up Limit: Maximum accumulated magnification can be selected.
- Off: Sens-Up function is cancelled.

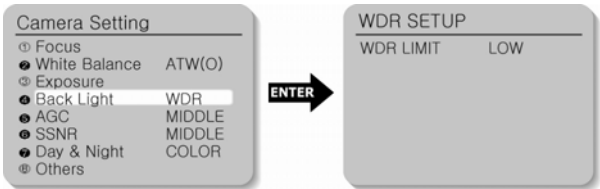


Note

As the accumulated magnification increases, the screen goes bright. But, the after image of the moving object also becomes larger and the optimum Auto Focus function may not work

5.2.3. Back Light

As Samsung's own SV-III DSP chip technology is adopted, even under excessive backlight condition, both the object and the background can be displayed clearly unlike other cameras.



- WDR : When both, bright and dark areas exist, the objects of the two areas can be seen clearly.
 - WDR Limit: High, Middle or Low mode can be selected.
- Off : WDR function is cancelled.

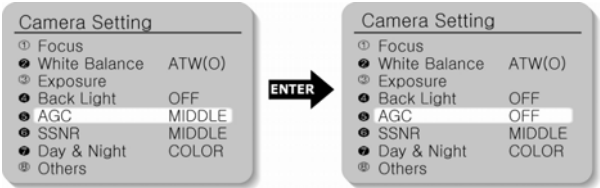


Note

- When the Shutter menu is in Manual mode, WDR function cannot be used.
- When the WDR function is used, the following results may occur depending on lightning conditions. Under these conditions, turn off the WDR mode.
 - Unnatural color change or unnatural screen may occur.
 - There may be noises in the bright area of the screen.
- WDR performance may vary depending on the bright areas on the screen. Thus, optimize the camera installation angle for optimized WDR function.
- If the WDR Limit is increased, the screen may become unnatural.

5.2.4. AGC

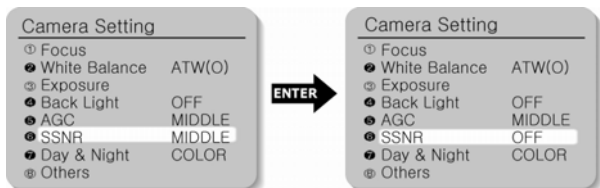
When the brightness of the image taken under dark light is under a certain level, the AGC (Automatic Gain Control) functions to define whether to control the Gain automatically or not.



- Select one mode among High, Middle, Low or Off.

5.2.5. SSNR (Samsung Super Noise Reduction)

SSNR function reduces background noise under low light conditions differently in different modes. The noise reduction effect grows in Off, Low, Middle and High modes in order.



- OFF : No noise reduction effect.
- LOW : Noise reduction effect is small but there is little afterimage.
- MIDDLE: Noise reduction effect is generally effective in this mode. Noise can be reduced properly and the afterimage is not strong.
- HIGH : Noise reduction effect is excellent but afterimage is also strong.

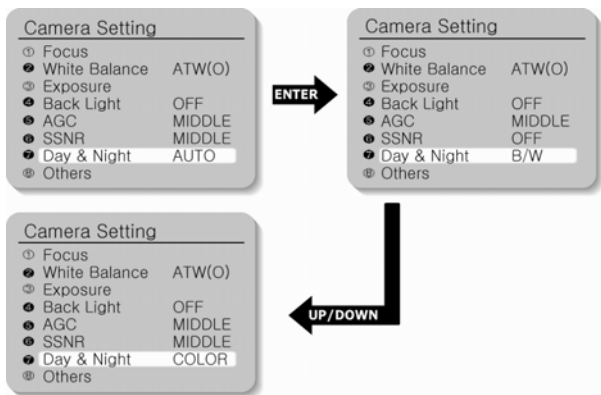


Note

When you select the AGC mode as "OFF", you cannot use the SSNR function.

5.2.6. Day & Night

The darkness level is detected automatically under low light conditions such as at night or under dark light to keep the screen bright and clear.



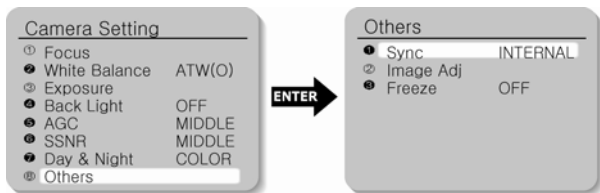
- **COLOR** : Output images are displayed in color all the time. Burst signal size can be adjusted.
- **B/W** : Output images are displayed in black and white all the time. Burst signal can be kept or removed.
- **AUTO** : Under day condition, the mode is automatically changed into the COLOR mode to keep an optimum color. At night, the mode is automatically changed into the B/W mode to distinguish dark images clearly.



Note

- If the AGC is in OFF mode, the Auto mode cannot be used. Only COLOR or B/W mode can be used.
- If the sunlight or halogen lamp is used in B/W mode, the focus may be blurred compared with the general illumination.

5.2.7. Others



① Sync

Internal Sync or Line Lock can be selected. Internal Sync is selected by default. Line Sync function can adjust the output phase of more than 1 unit without using sync signal generator. When the AC Line Lock is selected, the phases can be adjusted from 0 to 360 levels. Accordingly, the phase can be adjusted up to 360°.

- Internal : Internal synchronization
- Line Lock : Power line synchronization
- Line Lock Phase : The phase of line sync can be selected from 0° to 360°. Initial value is 225°.

② Image Adj.

Brightness, sharpness and color density of the image signal can be adjusted.

- Tone : The overall brightness of the screen can be adjusted.
- Sharpness : The overall sharpness of the image can be adjusted.
- Color : The overall color density of the image can be adjusted.

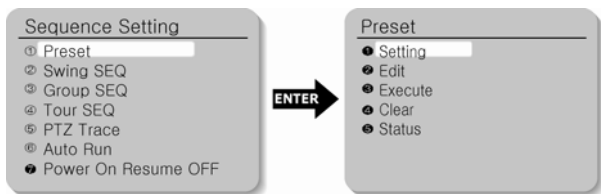
③ Freeze

Moving image can be stopped and replayed.

- ON: Image can be frozen.
- OFF: Frozen image is released and the film is replayed.

5.3. Sequence Setting

Sequence Setting Menu



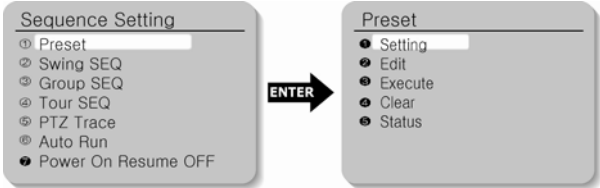
5.3.1 Preset

12 items such as Pan/Tilt location, Zoom and Focus are selected among camera functions and they can be called for monitoring. Total 128 points can be preset.

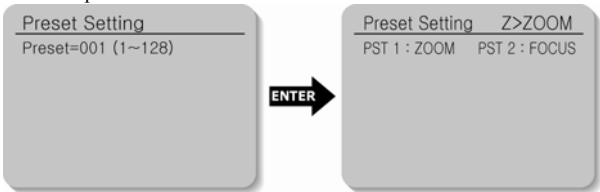
- Edit : You can edit the 11 preset items such as Pan/Tilt location, Zoom and Focus, which are selected among camera functions.
- Execute : Select the Preset number for execution.
- Clear : Select the Preset number to delete for clearing.
- Status : The current Preset number setup is displayed.

■ Preset Menu Setting

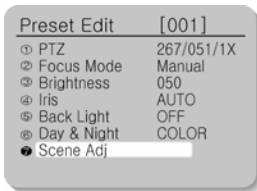
1. Select the Preset item on the Sequence Setting Menu.
2. Select the Setting item.



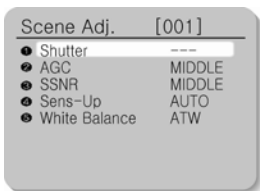
3. Select the Preset number.
4. Set up the Zoom and Focus.



5. If you want to edit the camera function setup items, go to each item and select it.

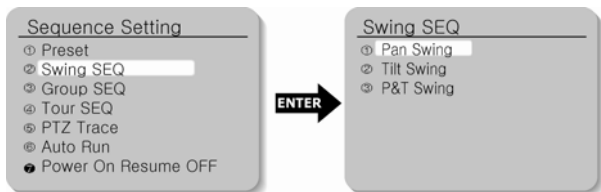


6. If you select the Scene Adj. item, such items as Shutter, AGC, SSNR, Sens-Up and White Balance can be set up differently in every Preset item.



5.3.2. Swing SEQ

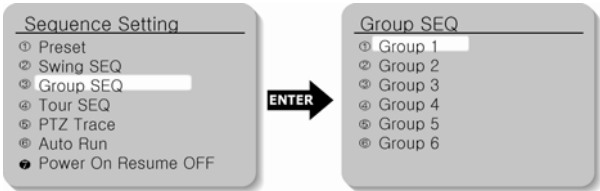
Swing surveillance can be executed and set up and the data can be deleted.



- Pan Swing : Swing surveillance for the Pan direction is executed and set up. Data is deleted.
- Tilt Swing : Swing surveillance for the Tilt direction is executed and set up. Data is deleted.
- P&T Swing : Swing surveillance both for the Pan and the Tilt directions are executed and set up simultaneously. Data is deleted.
 - Setting : Preset Position for Swing is selected and confirmed. SPD is the moving speed (1-64 °/sec). DWL is the stop time (1-128 sec).
 - Execute : Swing surveillance is executed.
 - Clear : Data in the Swing function is deleted.

5.3.3. Group SEQ

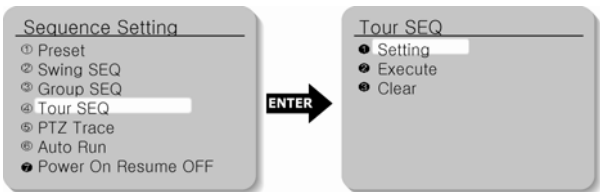
Sequence surveillance can be executed and set up and data can be deleted. Up to 6 groups can be registered.



- **Setting** : Preset position for swing is selected and confirmed. SPD is the moving speed (1-64 °/sec). DWL is the stop time (1-128 sec).
- **Execute** : Swing surveillance can be executed.
- **Clear** : Swing data can be deleted.

5.3.4. Tour

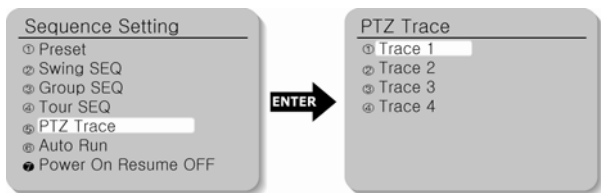
Group surveillance can be executed and set up and data can be deleted.



- **Setting** : The registered Group Sequence is selected and confirmed. If the selected number is not registered, it cannot be input.
- **Execute** : Group surveillance is executed.
- **Clear** : Group surveillance data are deleted.

5.3.5. PTZ Trace

Maximum 4 patterns of the manual operation paths (for Pan, Tilt, Zoom and Focus) are memorized and replayed.



Note

If the operation range is limited using ①Pan Limit and ②Tilt Limit, please note that other operations beyond the limited operation range are not possible.

- Memorize: Manual operations for minimum 120 seconds after executing this function are memorized into the internal memory. Nevertheless, the memorizing time becomes different depending on the PTZ operation. OVER mark will finish this function.



Note

If the operation range is limited using ①Pan Limit and ②Tilt Limit, only the operations within the limited range are memorized.

5.3.6. Auto Run

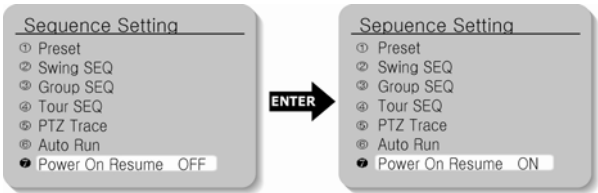
If there is no operation by the user for a certain time, the sequence operation designated by the user will be executed.

- Mode:
 - OFF : Auto Run will be cancelled.
 - Preset : Auto Run in the corresponding Preset number

- Swing : Auto Run in the corresponding Swing mode
- Group : Auto Run in the corresponding Group number
- Tour : Auto Run in the corresponding Tour number
- Trace : Auto Run in the corresponding Trace number
- A. Pan : 360° Auto Run in Pan direction
Auto Pan Speed: Pan operation in the speed designated by the user
Tilt Angle: The tilt angle set up by the user is kept.
- Time : Auto Run operation is executed after a certain time designated by the user.(Time can be set up by the unit of 1-59 sec and 1-59 min.)

5.3.7. Power On Resume

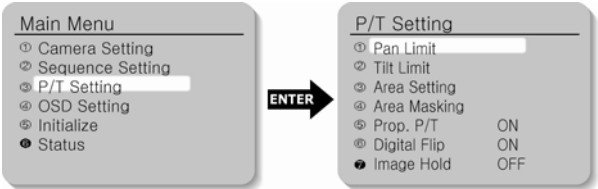
When the power supply for the camera is stopped for some reason, such as electricity failure, and resumed, the Sequence Settings before the power off are restored.



5.4. P/T Setting

5.4.1. Pan Limit

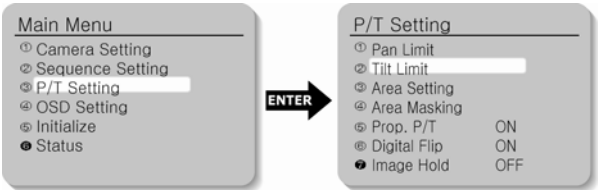
The moving range in the Pan direction can be limited.



- Position : Moving range can be set up. Set the position from the left. The stop position may change due to the initialization by such operation as power resumption depending on position setting. This does not mean it is out of order.
- On/Off : When this function is on, the limit is effective. Default setting is Off.

5.4.2. Tilt Limit

Moving range in the tilt direction can be limited.

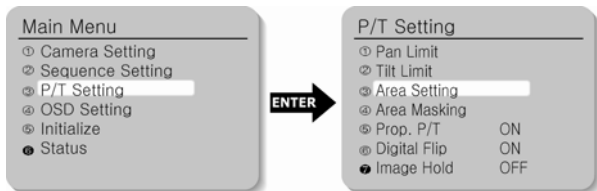


- Position : Moving range can be set up. Set the position from the top direction. The stop position may change due to initialization by such operation as power resumption depending on position setting. This does not mean it is out of order.

- On/Off : The application of limitation will be determined. Default setting is Off.

5.4.3. Area Setting

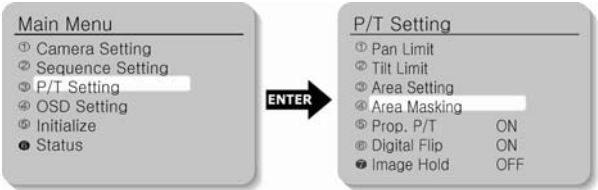
Areas can be indicated. Areas can be designated up to 8.



- Area Name : Area name can be set up. A maximum of 12 letters (English, Chinese, numbers) can be entered. When you finish inputting the name, adjust the position mark to "SET".
- Area Position : Area range can be designed. If the area range is overlapped, the smaller area number will indicate the overlapping part.
- On/Off : It can be determined whether or not to activate the area mark. The activation becomes effective as soon as the position moves from the current area to other areas. Set up the OSD Setting as ON. If it is in OFF mode, this function does not work. Default setting is OFF.

5.4.4. Area Masking

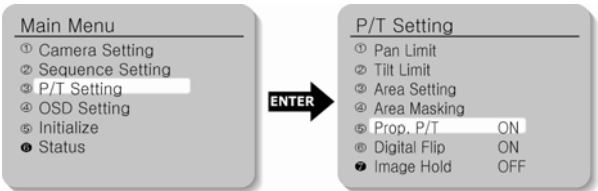
If you want to exclude some areas for surveillance, they can be turned into black. You can mask 8 parts of one screen (maximum 32 parts).



- Position : Detect the position for screen operation from the left.
- On/Off : Operation of screen area masking can be determined. Default setting is OFF.

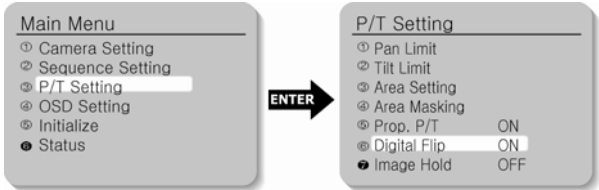
5.4.5. Prop. P/T

Pan and Tilt speeds can be changed depending on zoom magnification. Tele will slow down the speed of Pan/Tilt and Wide will increase the Pan/Tilt speed. It will take about 15 seconds for 1 cycle in Tele mode and about 1.5 seconds in the Wide mode. Default setting is ON.



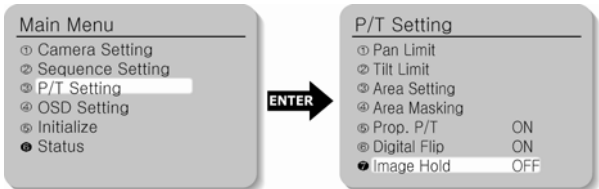
5.4.6. Digital Flip

When you operate the Tilt up to 90° limit and keep it for a certain time, the image gets reversed automatically and the opposite Tilt area is seen. When you want to monitor the moving object under the camera, execute the Digital Flip function. You can observe the moving object without reversing of the screen.



5.4.7. Image Hold

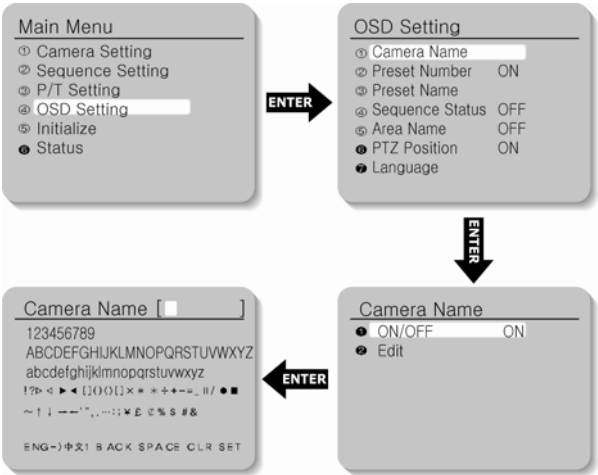
When moving from one Preset item to another Preset item, the Preset image before moving can be held before the camera direction reaches to the new Preset position. This function is for visual convention of monitoring observer.



5.5. OSD Setting

5.5.1. Camera Name

Camera ID indication is set up.



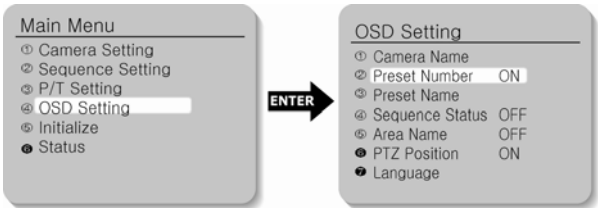
Note

If you want to edit the item, move the cursor. Then select the character.

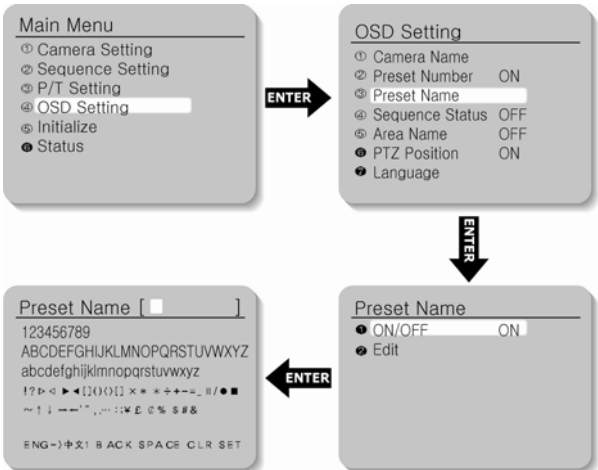
- **Edit :** A maximum of 12 characters consisting of English (or Chinese), numbers and special characters can be input for Camera Name.
- **On/Off :** The operation of this function is preset. Default setting is On.

5.5.2. Preset Number

Preset numbering is set up. (Default setting is ON.)



5.5.3. Preset Name

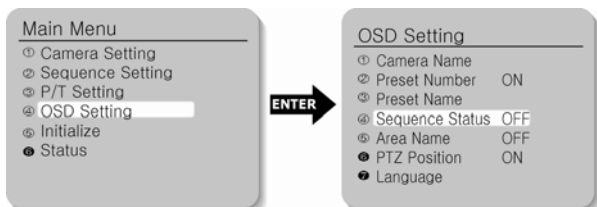


- Edit : A maximum of 12 characters consisting of English (or Chinese), numbers and special characters can be input for Preset Name.

- On/Off : The operation of this function is predetermined. Default setting is On.

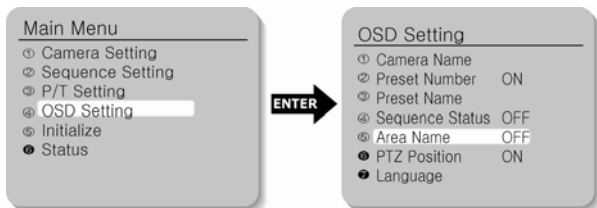
5.5.4. Sequence Status

Display of the Sequence Group is set up. (Default setting is ON.)



5.5.5. Area Name

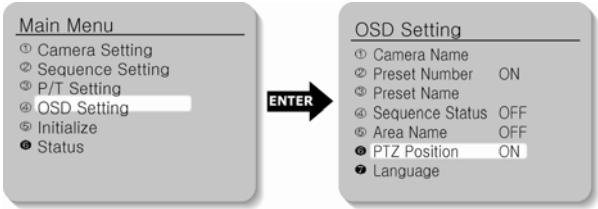
Display of Area Name is set up.



5.5.6. PTZ Position

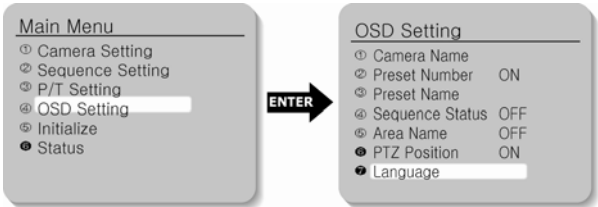
Pan and Tilt position and Zoom magnification are displayed.

PTZ positions are not displayed in the OFF mode. (Only manual operation can display them.)



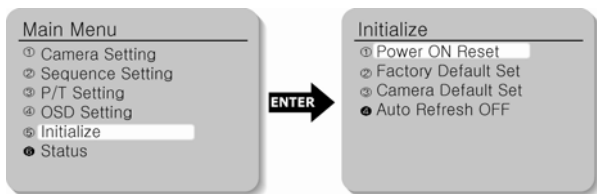
5.5.7. Language

It selects a language.(English, Chinese)



5.6. Initialization Setting

Initialization Menu



①Power On Reset

Camera is initialized into the original status of power input.

②Factory Default Settings

Camera is initialized into the factory default settings. Data including Preset is deleted. This function is used for initialization all settings.

③Camera Default Settings

If only the camera module is replaced due to camera module failure, the new camera module can be set up with the settings of the old camera module.

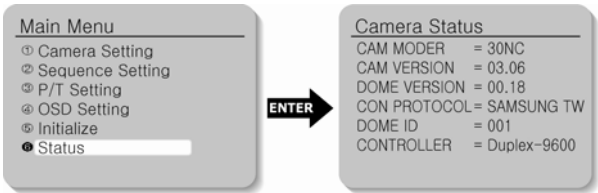
④Auto Refresh

The electric circuit and the status of the equipment parts within the camera are optimized regularly. (The cycle can be set up.) If camera faces toward a certain source of light or if the settings cannot be kept because of the long time rotation filming of a certain area, the Auto Refresh function is used to maintain and re-set the existing camera settings. Default setting is OFF.

- OFF, 1-7 Days : This function is disabled in the OFF mode. 1-7 Days enables the Auto Refresh operation in the interval of the selected days. Auto Refresh takes less than 10 seconds. The message "Auto Refresh" disappears after finishing the operation.

5.7. Status

The status of dome camera setting is displayed.



CAM MODEL= 30NC	Camera Model
CAM VERSION= 03.06	Camera S/W Version
DOME VERSION= 00.1	Control Board S/W Version
DOME ID= 001	Dome Camera ID
CONTROLLER= Duplex-9600	Communication Mode Setup

Ch6. Troubleshooting

If there are problems in operation, please refer to the items below. If the problem persists, please contact the agent you purchased this product from.

Problem	Solution
Nothing appears on the screen.	<ul style="list-style-type: none"> ▪ Please check the power connection. ▪ Please check the video signal line connection. ▪ Open MS-DOS window to check whether 30X PTZ Network Camera SNP-3300 is connected to network. ※ In case of ping 192.168.1.100, replace it with IP address set up at server
The video image is not clear.	<ul style="list-style-type: none"> ▪ Please check if the lens is clean. Please clean the lens with a clean cloth or brush. ▪ Please adjust the contrast feature of the monitor. ▪ Please make sure that the screen is not exposed directly to a bright light. Please move the camera if necessary.
The screen is dark.	<ul style="list-style-type: none"> ▪ Please adjust the contrast feature of the monitor. ▪ If you have an intermediate device, set the 75Ω/Hi-z properly, and check the terminals.
There is a problem with the camera operation. The camera surface is too hot and black stripes appear on the screen.	<ul style="list-style-type: none"> ▪ Please check if an appropriate power source to the camera complies with the manufacturer's standard requirement, or if the voltage keeps changing.

Problem	Solution
The MOTION DETECTION function is not working.	<ul style="list-style-type: none"> ▪ Please check if 'MOTION DETECTION' mode is turned on. ▪ Please check if the MD LEVEL is too low. ▪ Please check the setting of the MD AREA.
When camera cannot be controlled for Pan/ Tilt/ Zoom	<ul style="list-style-type: none"> ▪ Inspect the cables(power or network) connected to the device. ▪ Connect to Admin page to check whether user control is selected.
Colors are not quite right.	<ul style="list-style-type: none"> ▪ Please check the 'WHITE BAL' setting.
The screen is flickering.	<ul style="list-style-type: none"> ▪ Please check if the camera is facing directly into sunlight or fluorescent light.
L/L mode isn't able to be selected.	<ul style="list-style-type: none"> ▪ Please check the frequency of power supply (60Hz for NTSC, 50Hz for PAL).
DAYNIGHT(Auto) mode is not working.	<ul style="list-style-type: none"> ▪ Please check if the AGC menu is set to the OFF position.
SENS-UP function is not working.	<ul style="list-style-type: none"> ▪ Please check if the AGC menu is set to the OFF position. ▪ Please check if the SHUTTER menu is set to MANUAL mode. ▪ Please check the limit of SENS-UP AUTO mode.

Problem	Solution
Audio is not working	<ul style="list-style-type: none"> ▪ Please check the audio is selected from admin page. ▪ Please check speaker volume from the viewer. ▪ In case input sound through microphone at Viewer is not outputted through Audio Out of server, please check whether Audio Out channel is selected at admin page. Or check whether microphone is available at Viewer. ▪ Please check audio driver is working in user's PC.
Video is stopped	<ul style="list-style-type: none"> ▪ Please check whether network cable of 30X PTZ Network Camera SNP-3300 is correctly connected ▪ In case user uses hub or IP router, check whether these network equipments are working properly. ▪ Open MS-DOS window and check whether 30X PTZ Network Camera SNP-3300 is connected to network.
No image from web viewer	<ul style="list-style-type: none"> ▪ Click 'refresh (shortcut; F5) ' button at browser to recall the page ▪ Check whether power of camera and network cable is properly connected. ▪ Check whether computer is connected to network. ▪ If you use hub or router, check whether such equipments are properly operated. (Note: Open MS-DOS window and enter network ID of camera at ping 192.168.1.100) ▪ Connect to Admin page to check whether video output is selected.

Problem	Solution
Image transferred to FTP or by E-mail cannot be viewed	<ul style="list-style-type: none">▪ Video may not be viewed since Divx codec is not installed in user's PC. Divx codec can decode video compressed with MPEG4. Download and install the latest Divx codec, and check video. http://www.divx.com/divx/download

Appendix A. DDNS Usage

Registration process of DDNS is as following:

○ **Step1) Complete the registration form in iPOLiS website.**

The website is 'www.samsungipolis.com'.



Figure A-1. Website of iPOLiS

SIGNUP My IPOLIS > Signup



Welcome to IPOLIS

We provide real-time online video service for IPOLIS products through this web browser.
We recommend strongly every purchaser of IPOLIS products sign up for IPOLIS online.

LEGAL NOTICE

Legal Notice

NO. 1


NO. 2

☒ Agree

NEXT

Figure A-2. Membership Registration: SIGNUP

SIGNUP My IPOLIS > Signup



Welcome to IPOLIS

We provide real-time online video service for IPOLIS products through this web browser.
We recommend strongly every purchaser of IPOLIS products sign up for IPOLIS online.

Manage your account

+ ID	<input type="text"/>		AVAILABILITY
+ PASSWORD	<input type="password"/>		+ Create password of 6 to 12 characters in length containing letters A-Z or numbers 0-9.
+ PASSWORD Check	<input type="password"/>		
+ NAME	<input type="text"/>		
+ JOB	<div>--- Choose --- v</div>		
+ E-mail	<input type="text"/>		
+ ADDRESS	<div><input type="text"/> POSTAL CODE <input type="text"/></div>		
+ TEL	<input type="text"/>		
+ MOBILE PHONE	<div><div>--- Choose --- v</div> - <input type="text"/> - <input type="text"/></div>		

Manage company account

+ COMPANY	<input type="text"/>
+ TEL	<input type="text"/>
+ FAX	<input type="text"/>
+ ADDRESS	<div><input type="text"/> POSTAL CODE <input type="text"/></div>

SIGN UP
BACK

Figure A-3. Membership Registration: Input your information.

○ Step2) Register the equipment after login.

WELCOME to IPOLIS !



The login interface features a large orange padlock icon with the word "Login" below it. To the right, there are input fields for "ID" (containing "andy") and "PASSWORD" (represented by dots), followed by a "LOGIN >" button. Below the ID field is a "MEMBER JOIN" section with the text "Sign up for IPOLIS online" and a "SIGN UP >" button. To the right of that is an "ID/PW SEARCH" section with the text "User ID and password don't match" and an "ID/PW SEARCH >" button.

Figure A-4. Login

Product List My IPOLIS > Product List

 **Current product list is displayed.**
If wanted product is not in the list, click 'Product Registration' at the bottom.

NO	ID	Model	Location	Status	View	Information	Management
1	andy3300	SNP-3300	AMBASSADOR HOTEL	OFF	View	Check	Edit Delete
2	andy550	SNC-550	Lab	OFF	View	Check	Edit Delete

[Product Registration](#)

Figure A-5. The list of registered equipment.

Product Registration My IPOLIS > Product Registration

Mandatory Information

http://www.samsungipolis.com/ AVAILABILITY

ID(domain) *

- Create an ID of 4 to 12 characters in length containing letters A-Z or numbers 0-9.
- You should have exactly same ID with the item (product) ID to log on DDNS online service.
- Make sure the correct ID and click the item (product) ID.
- You may not able to change the initial domain name.

PASSWORD *

PASSWORD CHECK *

CLASSIFICATION * Choose ▼ - Choose product category.

MODEL NUMBER * Choose ▼ - Choose product model.

LOCATION *

- Determine the location to install the system (or camera).
- Designate the installation location within 10 alphabet letters.

DESCRIPTION

- Describe product for management purpose.

Registration > Cancel >

Figure A-6. The list of registered equipment.

IPOLIS HOME | SITEMAP | KOREAN | ENGLISH

WHAT IS IPOLIS PRODUCT DDNS SERVICE SUPPORT MY IPOLIS

MY IPOLIS

List of registered IPs *

- SAMSUNG CITY WEBSITE
- DOWNLOAD CENTER
- DDNS SERVICE

Product List My IPOLIS > Product List

 **Current product list is displayed.**
If wanted product is not in the list, click 'Product Registration' at the bottom.

NO	ID	Model	Location	Status	View	Information	Management
1	andy1000	SNP-1000	The RITZ-CARLTON Seoul	OFF	View	Check	Edit Delete
2	andy3000	SNP-3000	AMBASSADOR HOTEL	OFF	View	Check	Edit Delete
3	andy550	SNC-550	Lab	OFF	View	Check	Edit Delete

Product Registration

PRIVACY / LEGAL NOTICE / CONTACT US **SAMSUNG TECHMILE** FAMILY SITE Quick Link

Figure A-7. Product Registration.
(Confirm repetition certainly at domain registration.)

○ Step3) Configure DDNS information in the equipment.

Click the part of Network Configuration in website of Network Camera.

Click "USE DDNS" in order to do "Enable" and input the address of DDNS Server.

(Default: www.samsungipolis.com)

Enter the ID and Password that is written when register product is in iPOLiS website.

The screenshot shows the iPOLiS Network Setup web interface. On the left is a sidebar with navigation icons for Live, Basic, Network, User, Pan/Tilt/Zoom, Motion Detection, Alarm/Sensor, Time, Log, Upgrade, System Reboot, and Log Out. The main content area is titled "Network Setup" and contains two sections:

- Network Configuration**:
 - ☒ LAN:
 - IP Address: 192 . 168 . 1 . 100
 - NetMask: 255 . 255 . 255 . 0
 - Gateway: 192 . 168 . 1 . 1
 - DNS1: 168 . 126 . 63 . 1
 - DNS2: 168 . 126 . 63 . 2
 - ☐ xDSL:
 - User Name: []
 - Password: []
 - ☒ DHCP
- Port/DDNS Configuration**:
 - Connection Port: 4000 (default: 4000)
 - HTTP Port: 80 (default: 80)
 - FTP Port: 21 (default: 21)
 - Use SWR: ☐ Enable ☒ Disable
 - DDNS Server: www.samsungipolis.com
 - ☒ Use DDNS:
 - ID: andy1000
 - Password: []

At the bottom of the form are "Save" and "Cancel" buttons.

The Configuration of DDNS in SNP-3300 is Completed.

- **Step4) Confirm the connection status of relevant product in product list of iPOLiS website.**

MY iPOLiS

Product List

Current product list is displayed.
If wanted product is not in the list, click 'Product Registration' at the bottom.

NO	ID	Model	Location	Status	View	Information	Management
1	andy1000	SNP-1000	The RITZ-CANTON Seoul	ON	View	Check	Edit Delete
2	andy3000	SNP-3000	AMBASSADOR HOTEL	OFF	View	Check	Edit Delete
3	andy550	SNC-550	Lab	OFF	View	Check	Edit Delete

[Product Registration](#)

Figure A-8. The List of Product.

Be able to confirm the information of connected equipment if click <check> button of 'Product information'.

Product Information

• ID(domain)	andy1000
• PRODUCT	
• MODEL NUMBER	SNP-1000
• CLASSIFICATION	Urban security
• LOCATION	The RITZ-CARITON Seoul
• REGISTRATION DATE	2008-05-22
• MAC ADDRESS	

✕ CLOSE


Figure A-9. Product information

Move to Login website of relevant product if click <view> button of 'view'.

The buttons which are <Edit> and <Delete> of 'product management' move to relevant page through input password to item that fertilize or erase information of registered equipment in List of product.

Only, 'ID(Domain)' of product should establishes again as 'ID(Domain)' after deleting because it can't be fertilized.

WELCOME to IPOLIS !



Login

• ID

• PASSWORD

MEMBER JOIN
 Sign up for IPOLIS online

ID/PW SEARCH
 User ID and password don't match

Figure A-10. Edit/Delete

Specifications

Items	SNP-3300N	SNP-3300P
Imaging device	1/4" Color Vertical Double Density Interline CCD. 410,000pixel	
TV	NTSC	PAL
Total Number of Pixels	811(H) X 508(V)	795(H) X 596(V)
Valid Pixel	768(H) X 494(V)	752(H) X 582(V)
Horizontal Scan Frequency	15.734kHz	15.625KHz
Vertical Scan Frequency	59.94Hz	50Hz
Synchronization	Internal Sync/External Sync(AC Line Lock)	
Image Output	1.0p-p/75Ω	
S/N Ratio	Higher than 50dB (AGC OFF)	
Horizontal Resolution	520 TV Lines (Color)/570 TV Lines(B/W)	
Minimum Light for Object	0.4Lux(Color),0.08Lux(B/W)/(@50IRE), 0.0006Lux (Day & Night is On.)/(@50IRE)	
Electronic Shutter	Auto/Manual (1/60 - 1/120.000)	
Sens-Up	ON (x2 - x128 Fields) / OFF	
Day & Night	ICR(Filter Switching) ON/OFF	
WDR	52dB ON/OFF	
White Balance	ATW(Indoor/Outdoor Selection)/AWC/ Manual (1,800K - 10,500K)	
Flickerless Adjustment	Fixed Shutter Speed (1/100)	Fixed Shutter Speed (1/120)
Iris	Auto/Manual (Iris Level Adjustment Mode)	
Gain Control	Low, Middle, High, Off	
OSD Display	ON/OFF	
Outline Correction	Adjustable Level	
Contact Point Distance	F3.3 ~ 99.0mm(30X Optical Zoom)	
Digital Zoom	OFF, 2X, 4X, 8X(Total 240X Zoom)	
Maximum Aperture Rate	Light Angle 1:1.6 Telescopic 1:3.7	
Coverage Angle	F=3.3mm 58°(Horizontal) X 44.8°(Vertical) f=99.0mm 2.22°(Horizontal) X 1.68°(Vertical)	
Proximity Distance	1.2m(Tele level)	
Horizontal Rotation Angle	360°	
Horizontal Rotation	Manual/Program	
Horizontal Rotation Speed	Manual: 0.5° ~ 120°/s(64 levels) Preset: 0.5° ~ 240°/s(64 levels)	
Horizontal Minimum Moving Angle	0.05°	
Accuracy of Horizontal Rotation Stop	0.30°	
Vertical Rotation Angle	-4°~ 184° (Digital Flip)	

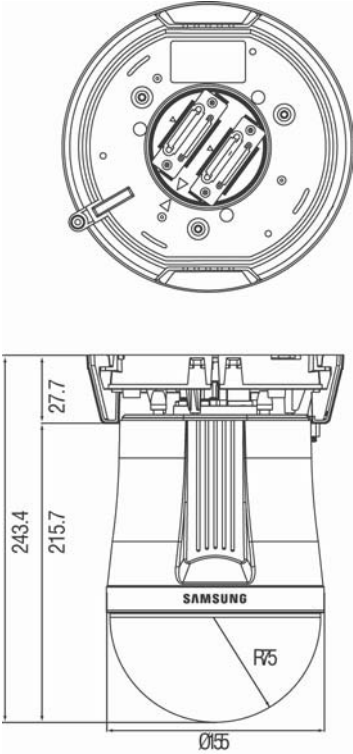
Items		SNP-3300N	SNP-3300P
Vertical Rotation		Manual/Program	
Vertical Rotation Speed		Manual: 0.5° - 120°/s(64 levels) Preset: 0.5° - 240°/s(64 levels)	
Vertical Minimum Moving Angle		0.04°	
Accuracy of Vertical Rotation Stop		0.30°	
Preset Position		Max 128 points	
Area Masking		Max 8 locations	
Alarm		4 Alarm Inputs	
		2 Alarm Outputs (Relay: NC/NO/COM, 0.5A 125VAC, 2A 30VDC Max)	
Operating Temperature		0°C - +40°C	
Operating Humidity		30% ~ 80%(Except for dew condensation)	
Power, Voltage		AC 24V±10%	
Consumption Electricity		Max 18W	
Dimension		Ø155 X 243.4mm	
Weight		Less than 2.5kg	
Installation Conditions		- Ceiling Bracket: STB-330PC - Indoor: Indoor Housing (STH-330PIV), Embedded Housing(STH-330PEV) - Outdoor: Outdoor Housing (STH-320PO) - Wall Bracket: STB-270PWV - Pendant Bracket: STB-496PPV	
Output Video Format		MPEG4 / MJPEG Selectable	
Output Resolution		NTSC : 704 x 480(D1), 704 x 240(Half D1), 352 x 240(CIF) PAL : 704 x 576(D1), 704 x 288(Half D1), 352 x 288(CIF)	
Video Compression Stage		5 stages (Very Low, Low, Middle, High, Very High)	
Audio Format		Bi-directional audio, 8KHz ADPCM	
Ethernet		10/100Mbps	
Protocol		HTTP, TCP/IP, PPPOE, FTP, SMTP, DHCP, DNS, DDNS, NTP	
Dynamic IP		Supports XDSL and DHCP	
DDNS		Supports DDNS	
Max. User		20 Users	
S/W	PC Viewer	Supplied	
	Web Page	Embedded Web Server	
	Web ActiveX		
	Control		

※ The product design and dimensions may change without previous notice for improvement of performance.

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Dimension



SAMSUNG TECHWIN



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